53-1001792-01
January 31, 2010

Fixed Rack Mount Kit

Installation Procedure

Supporting PowerConnect B-200E, 300, 4100, 4900, 5000, 5100, 5300, 7500 series, 7600, 7800, 8000, AP7420, Encryption Switch, and VA-40FC

53-1001792-01

Notes, Cautions, and Warnings

NOTE
A NOTE indicates important information that helps you make better use of your computer.

CAUTION
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CAUTION
A CAUTION indicates potential damage to hardware or loss of data if instructions are not followed.

DANGER
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Regulatory Model Codes: Brocade DCX-4S, Brocade DCX

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Introduction

This document provides instructions to install a 1U, 1.5U, or 2U switch (or SAN Router) in a 19-in. (48.3 cm) EIA cabinet using the Fixed Rack Mount Kit.

The supported switches are listed in Table 1. The switch can be installed so that the port side is either flush with the front rails or recessed from the front rails. A recessed position allows a more gradual bend in the fiber optic cables connected to the switch.

TABLE 1 **Supported switches**

Switch Height	Switch Model
1U	PowerConnect B-200E PowerConnect B-300 PowerConnect B-4100 PowerConnect B-5000 PowerConnect B-5100 PowerConnect B-7500 series PowerConnect B-7600 PowerConnect B-7800 PowerConnect B-8000 PowerConnect B-VA-40FC
2U	PowerConnect B-4900 PowerConnect B-5300 PowerConnect B-AP7420 Brocade Encryption Switch

Installation requirements

Allow 15 to 30 minutes to complete this procedure. Note the following requirements to ensure correct installation and operation:

- Provide space in a 19-in. (48.3 cm) EIA cabinet, as required for the switch type, with a minimum distance of 28.25 in. (71.76 cm) and a maximum distance of 29.88 in. (75.90 cm) between the front and back rails.
- Verify that the additional weight of the switch does not exceed the cabinet's weight limits.

- Ensure that an electrical branch circuit with the following characteristics is available:
  - Required voltage and frequency as indicated in the hardware reference manual. (200-230 VAC is always preferred)
  - Protection by a circuit breaker in accordance with local electrical codes.
  - Supply circuit, line fusing, and wire size that conform to the electrical rating on the switch nameplate.
  - Grounded outlet compatible with the power cord and installed by a licensed electrician.
- Ensure that all equipment installed in the cabinet is grounded through a reliable branch circuit connection. Do not rely on a secondary connection to a branch circuit, such as a power strip.
- Ensure that the cabinet is mechanically secured to ensure stability.
- Ensure that the air temperature at the fan inlet is less than 104^{o} Fahrenheit (40^{o} Celsius) during switch operation.
- Ensure that the airflow available at the air vents meets the minimum requirements for the switch.

ATTENTION
Install the switch with the fan side facing the air-intake aisle. The chassis air intake is on the fan side and exhaust is on the port side.

Tool requirements and parts list

The following items are required to install a switch using the fixed rack mount kit:

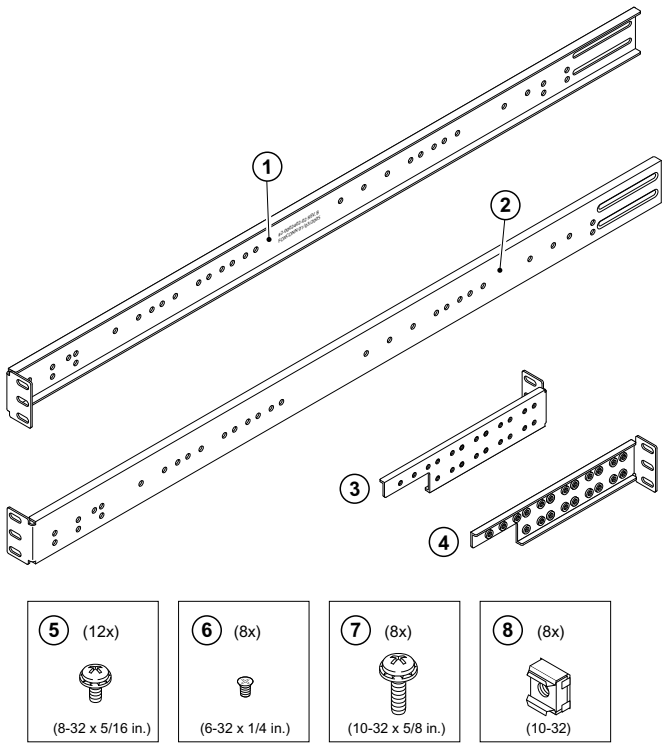
- Clamps or other means of temporarily supporting the switch in the cabinet.
- Phillips #2 screwdriver with torque capability.
- 1/4 in. slotted-blade screwdriver with torque capability.

ATTENTION
Use the screws specified for use with the switch. Longer screws can damage the switch.

Ensure that the items listed in Table 2 and illustrated in Figure 1 are included in the kit.

TABLE 2 Parts list

Item	Description	Quantity
1	Bracket, front right	1
2	Bracket, front left	1
3	Bracket, rear right	1
4	Bracket, rear left	1
5	Screw, 8-32 x 5/16 in., panhead Phillips (torque to 15 in.-lbs, 17 cm-kgs)	12
6	Screw, 6-32 x 1/4 in., flathead Phillips (torque to 9 in.-lbs, 10 cm-kgs)	8
7	Screw, 10-32 x 5/8 in., panhead Phillips (torque to 25 in.-lbs, 29 cm-kgs)	8
8	Retainer nut, 10-32	8



1	Bracket, front right	5	Screw, 8-32 x 5/16 in., panhead Phillips
2	Bracket, front left	6	Screw, 6-32 x 1/4 in., flathead Phillips
3	Bracket, rear left	7	Screw, 10-32 x 5/8 in., panhead Phillips
4	Bracket, rear right	8	Retainer nut, 10-32

FIGURE 1 Items in Fixed Rack Mount Kit

Installation procedure

ATTENTION
The switch must be turned off and disconnected from the fabric during this procedure.

NOTE
Although this document describes how to install a 1U, 1.5U, and 2U switch, the illustrations show a 1U switch as a typical configuration.

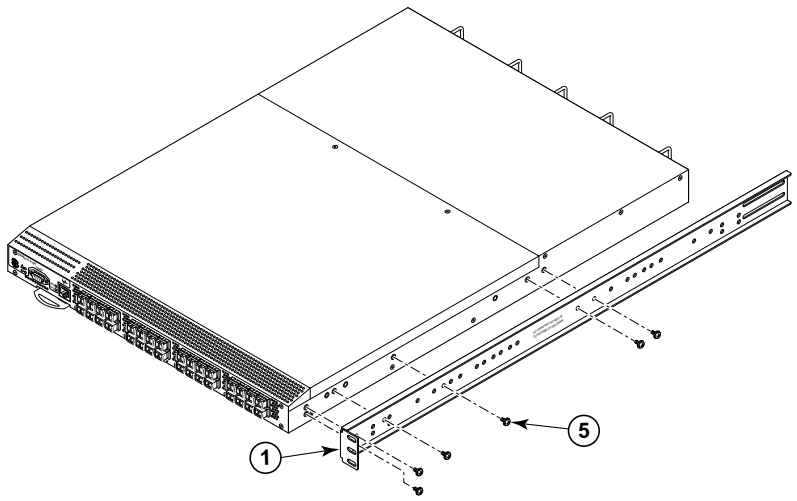
Complete these tasks to install the switch in a cabinet:

- "Attaching front brackets"
- "Installing the switch in the cabinet"
- "Attaching rear brackets to front brackets"
- "Attaching rear brackets to cabinet rails"

Attaching front brackets

Complete the following steps to attach the front brackets to the switch.

1. Position the right front bracket (Item 1) with the flat side against the right side of the switch (Figure 2).
2. Insert two 8-32 x 5/16 in. screws (Item 5) into one of the pairs of vertically aligned holes in the bracket and then into the pair of holes on the side of the switch. To install the switch in a recessed position in the cabinet, use the bracket holes that are set back from the end of the bracket.
3. Insert each 8-32 x 5/16 in. screw (Item 5) through the holes in the bracket and into the corresponding hole in the switch.
4. Tighten all 8-32 x 5/16 in. screws to a torque of 15 in.-lbs (17 cm-kgs).
5. Repeat step 1 through step 5 to attach the left front bracket (Item 2) to the left side of the switch.



1 Bracket, front right

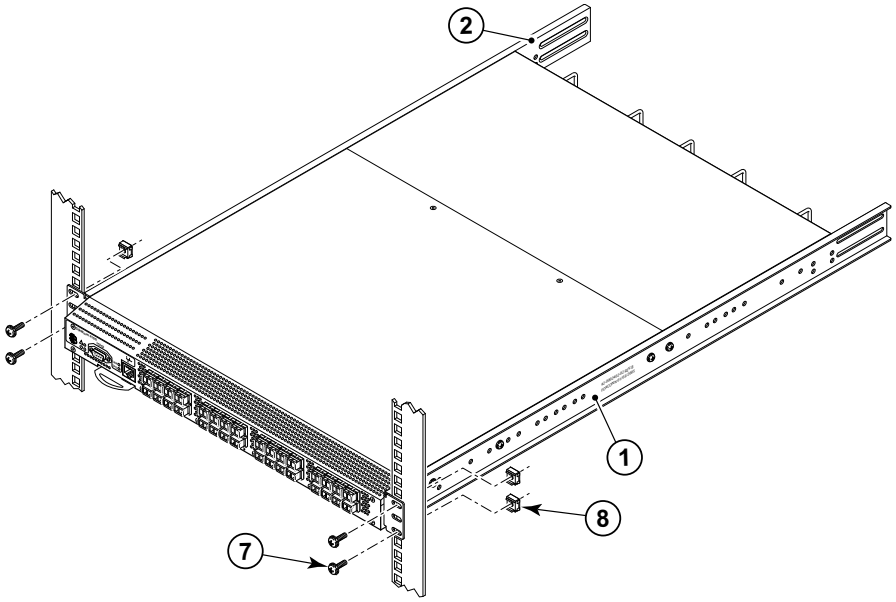
5 Screw, 8-32 x 5/16 in., panhead Phillips

FIGURE 2 Position the front bracket

Installing the switch in the cabinet

Complete the following steps to install the switch in the cabinet.

1. Position the switch in the cabinet (Figure 3), providing temporary support under the switch until the rail kit is secured to the cabinet.
2. Attach the right front bracket (Item 1) to the right front rack rail using two 10-32 x 5/8 in. screws (Item 7) and two retainer nuts (Item 8).
3. Repeat step 2 to attach the left front bracket (Item 2) to the left front rack rail.
4. Tighten all 10-32 x 5/8 in. screws (Item 7) to a torque of 25 in.-lbs (29 cm-kgs



1	Bracket, front right	7	Screw, 10-32 x 5/8 in., panhead Phillips
2	Bracket, front left	8	Retainer nut, 10-32

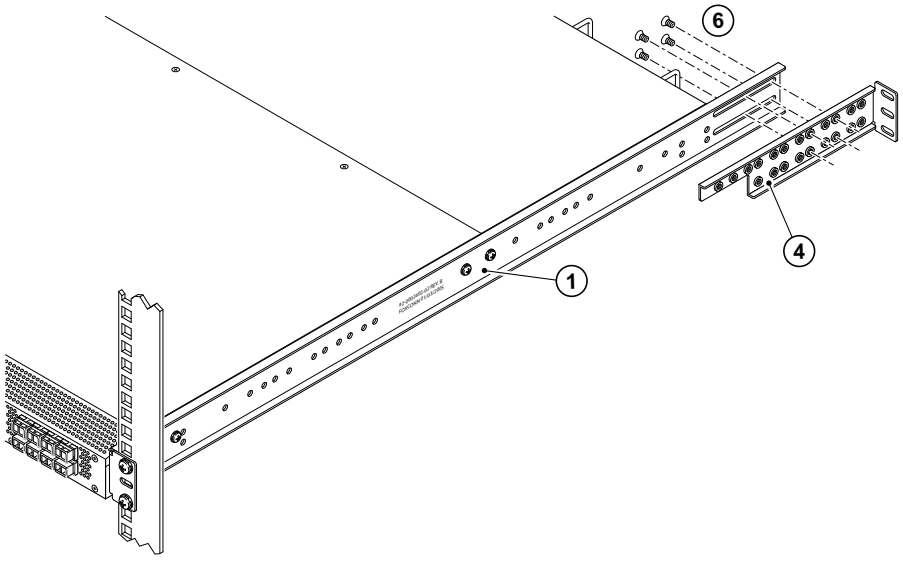
NOTE
The figure above is shown with a recessed mounting configuration on the left and a flush mounting configuration on the right. You can select either mounting option.

FIGURE 3 **Position the switch in the cabinet**

Attaching rear brackets to front brackets

Complete the following steps to attach the rear brackets to the front brackets.

1. Position the right rear bracket (Item 4) inside the right front bracket (Item 1) (Figure 4).
2. Attach the brackets using four 6-32 x 1/4 in. screws (Item 6).
3. Adjust the brackets to cabinet depth and tighten the Item 6 screws to a torque of 9 in.-lbs (10 cm-kgs).
4. Repeat step 1 through step 3 to attach the left rear bracket (Item 3) to the left front bracket (Item 2).



1 Bracket, front right
4 Bracket, rear right
6 Screw, 6-32 x 1/4 in., flathead Phillips

FIGURE 4 Position the rear and front brackets

Attaching rear brackets to cabinet rails

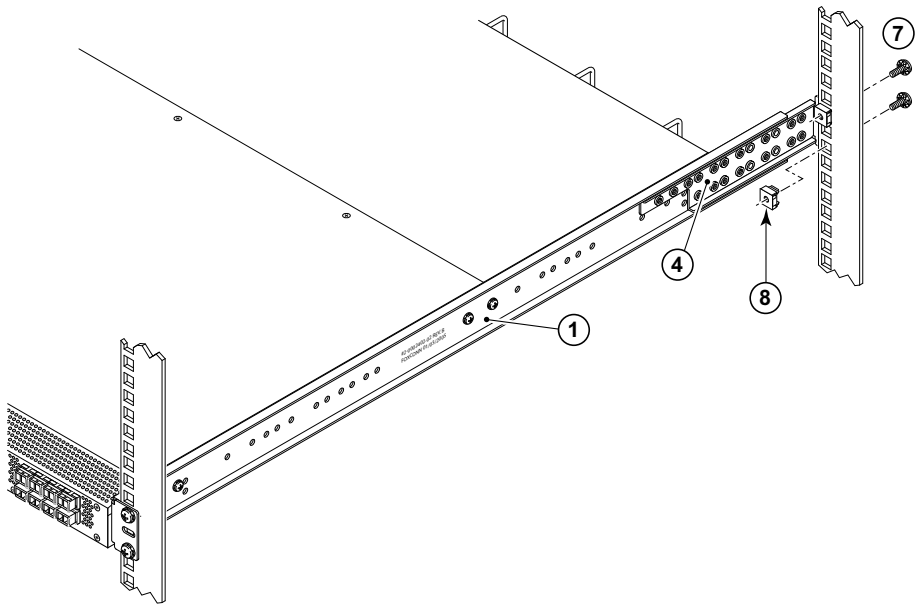
Complete the following steps to attach the rear brackets to the cabinet rails.

1. Attach the right rear bracket (Item 4) to the right rear cabinet rail using two 10-32 x 5/8 in. screws (Item 7) and two retainer nuts (Item 8) (Figure 5).
2. Repeat step 1 to attach the left rear bracket (Item 3) to the left rear cabinet rail.
3. Tighten the 10-32 x 5/8 in. screws (Item 7) to a torque of 25 in.-lbs (29 cm-kgs).

ATTENTION
Connect the power cords to a grounded outlet only. Ensure that any power cord is routed so that it is not exposed to stress. Leave a minimum service loop of 6 in. in the power cord(s) at the connection to switch. This allows enough freedom of movement to plug and unplug the power cord(s).

4. Provide power to the switch by connecting the power cord(s) to the power connectors on the switch and a power outlet. Some switches require you to flip a power switch to be powered on.

NOTE
Do not connect the switch to the network until the IP address is correctly set. Refer to the appropriate hardware reference manual for information on setting the IP address for the switch.



1	Bracket, front right	7	Screw, 10-32 x 5/8 in., panhead Phillips
4	Bracket, rear right	8	Retainer nut, 10-32

FIGURE 5 Attach the rear bracket to the cabinet rail